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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,663	10/20/2003	Srikanth Natarajan	200309987	1858
22879	7590	02/18/2005	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			RAO, SHEELA S	
			ART UNIT	PAPER NUMBER
			2125	

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/687,663

Applicant(s)

NATARAJAN ET AL.

Examiner

Sheela Rao

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-36 are pending and presented for examination.
2. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

3. The abstract of the disclosure is objected to because it does not clearly describe the intent of the instant invention. It is a mere reiteration of instant claim 1. A more descriptive Abstract allows for a better understanding of what is to come within the body of the instant disclosure. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-36 is rejected under 35 U.S.C. 102(b) as being anticipated by Stracke, Jr. in US Patent No. 6,047,330.

The patented reference discloses a virtual router system for computer applications. The system according to the patented invention provides a router discovery system capable of automatically configuring a virtual network topology. The patented reference teaches the limitations of the instant invention, as per instant claims 1, 6, 10, 15, 19, 24, 28, and 33, in that the obtaining information of a virtual router and using this information to determine the health of the virtual router is taught in column 1 at line 65, et seq. and in more detail in column 3, beginning at line 10. Wherein, it is taught that the transmission of a "heartbeat" is initiated and the data storage portion of the system records the number of hops or length of time that it takes for the heartbeat to reach its destination. In the event that the number of hops is high, the destination router is discarded and/or changed. This is analogous to the "health" of the router in the instant application. Further, this information that is obtained is then used to produce a topology that identifies the health of the virtual router, see Figure 5.

With regard to the limitations of instant claims 2, 7, 11, 16, 20, 25, 29, and 34, the aspects of monitoring messages in the network, using the information from the messages in determining the health of the virtual router, and updating the topology based on any changes that are deemed necessary is taught by the prior art of record in column 2 at lines 12 through 30; wherein the transmission process of the heartbeats is explained.

As per instant claims 3, 12, 21, and 30, the limitation claimed is essentially the basis of the instant invention and is taught by the Stracke, Jr. reference as mentioned heretofore. Also, see col. 2: ll. 22-30 and col. 4: ll. 36-45.

As with claims 4, 8, 13, 17, 22, 26, 31, and 35, where first information is defined to be that of group priority information and group standby information is claimed, this is also taught by the reference of prior art as aforementioned since information to identify the status of the routers is taught in column 3 beginning at line 8.

With regard to claims 5, 9, 14, 18, 23, 27, 32, and 36, the instant claims are claiming that the routers operate according to a virtual swappable router protocol. In the disclosure by Stracke, Jr., the

routers operating in accordance with swappable router protocols is taught. The reference teaches that when a router goes down, the other routers open up connections until appropriate routers are established so as to restore connectivity of the virtual network. See col. 3: ll.34, et seq.

The instant claims are grouped in the following manner as relevant to the claimed subject matter.

- Claims 1-5 are directed to a method of identifying the health of the virtual router
- Claims 6-9 are directed to a method of identifying the health of the virtual router in a network.
- Claims 10-14 are directed to a management computer for identifying the health of the virtual router
- Claims 15-18 are directed to a management computer for identifying the health of the virtual router in a network
- Claims 19-23 are directed to a computer readable medium containing a program for performing a method of identifying the health of the virtual router.
- Claims 24-27 are directed to a computer readable medium containing a program for performing a method of identifying the health of the virtual router in a network.
- Claims 28-32 are directed to the means of a management computer for identifying the health of the virtual router.
- Claims 33-36 are directed to the means of a management computer for identifying the health of the virtual router in a network.

Examiner has outlined the invention as stated above to show identify the reason for combining the claims in the aforementioned rejection. The claims have been grouped together since each of the groups is essentially teaching the same limitations with the difference only being the environment, i.e. within a network or not, of functionality.

As to the use of a management computer and a computer readable medium in the form of a program as per claims 10-36, the reference of prior art teaches the use of The Manage Router Topology which manages the virtual network connections and automatically updates the database. In order for the

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computerized controller to be employed, a program or algorithm is necessary for it to function as needed for the system and/or method in use. See column 4, line 46, et seq. and Figure 5.

For the reasons stated above, the limitations of the claimed invention is taught by the prior arts of record; thereby, rendering the instant claims unpatentable.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Callon et al. USPN 5,854,899

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela Rao whose telephone number is (571) 272-3751. The examiner can normally be reached Monday - Friday from 9:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached on (571) 272-3749.

Any response to this action should be mailed to:

**Commissioner of Patents and Trademarks
Washington, D.C. 20231**

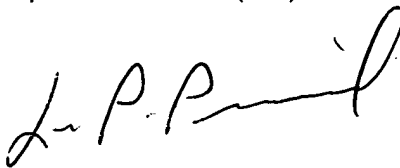
or faxed to:

(703) 305-3718 for Official Communications

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.



Sheela S. Rao
February 16, 2005



**LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**